



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

August 9, 2018

Michael Kellogg, Agent
Alligare, LLC
c/o Pyxis Regulatory Consulting Inc
4110 136th St. Ct. NW
Gig Harbor, WA 98332

Subject: Notification per PRN 98-10 – Adding Alternate Brand Name
Product Name: Alligare FLUMI BG
EPA Registration Number: 81927-67
Application Date: 07/31/2018
Decision Number: 543257

Dear Mr Kellogg:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the above referenced product. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

The label submitted with the application has been stamped “Notification” and will be placed in our records. The alternate brand name ‘PROMENADE Herbicide’ has been added to the product record.

Should you wish to add/retain a reference to the company’s website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product’s label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA’s Office of Enforcement and Compliance.

If you have any questions, you may contact Manjula Unnikrishnan at 703-347-8520 or via email at manjula.unnikrishnan@epa.gov.

Page 2 of 2
EPA Reg. No. 81927-67
Decision No. 543257

A handwritten signature in cursive script, appearing to read "Shaja B. Joyner".

Shaja B. Joyner, Product Manager 20
Fungicide-Herbicide Branch
Registration Division 7505P

[Note to reviewer: [Text] in brackets denotes optional text].

[Note to reviewer: {Text} in braces denotes where in the final label text will appear].

{[BOOKLET FRONT PANEL LANGUAGE]}

FLUMIOXAZIN	GROUP	14	HERBICIDE
-------------	-------	----	-----------

ALLIGARE FLUMI BG

[Alternate Brand Name: PROMENADE™ Herbicide]

DIRECTIONS FOR USE TO MAINTAIN BARE GROUND NON-CROP AREAS, CONIFER AND POPLAR RE-FORESTATION SITES*

*Not approved for use in conifer and poplar re-forestation sites in California.

ACTIVE INGREDIENT:	By Wt
Flumioxazin*	51.0%
OTHER INGREDIENTS:	<u>49.0%</u>
TOTAL:	100.0%

*(2-[7-flouro-3,4-dihydro-3-oxo-4-(2-propynyl)-2H-1,4-benzoxazin-6-yl]-4,5,6,7-tetrahydro-1H-isoindole-1,3(2H)-dione)

Alligare Flumi BG is a water dispersible granule containing 51% active ingredient.

KEEP OUT OF REACH OF CHILDREN CAUTION

See inside label booklet for [First Aid,] Precautionary Statements and Directions for Use.

EPA Reg. No. 81927-67

EPA Est. No.

Manufactured for:

Alligare, LLC
13 N. 8th Street
Opelika, AL 36801

Net Weight:

{LANGUAGE INSIDE BOOKLET}

FIRST AID	
If inhaled:	<ul style="list-style-type: none">• Move person to fresh air.• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.• Call a poison control center or doctor for further treatment advice.
If on skin or clothing:	<ul style="list-style-type: none">• Take off contaminated clothing.• Rinse skin immediately with plenty of water for 15 to 20 minutes.• Call a poison control center or doctor for treatment advice.
If in eyes:	<ul style="list-style-type: none">• Hold eye open and rinse slowly and gently with water for 15-20 minutes.• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.• Call a poison control center or doctor for treatment advice.
If swallowed:	<ul style="list-style-type: none">• Call a poison control center or doctor immediately for treatment advice.• Have person sip a glass of water if able to swallow.• Do not induce vomiting unless told to do so by a poison control center or doctor.• Do not give anything by mouth to an unconscious person.
HOT LINE NUMBER Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-424-9300 for emergency medical treatment information.	

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if inhaled or absorbed through the skin. Causes moderate eye irritation. Avoid breathing dust and spray mist. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse. Wear long-sleeved shirt and long pants, socks, shoes and waterproof gloves.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material including polyethylene or polyvinyl chloride
- Shoes and socks

USER SAFETY REQUIREMENTS

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS
Users should: <ul style="list-style-type: none">• Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.• Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This product is toxic to non-target plants and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high-water mark. Drift and runoff may be hazardous to non-target plants and aquatic organisms in neighboring areas. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from treated areas. Do not contaminate water when disposing of equipment washwaters or rinsate.

This pesticide is toxic to plants and should be used strictly in accordance with the drift and run-off precautions on this label in order to minimize off-site exposures.

Under some conditions this product may have a potential to run off to surface water or adjacent land. Where possible, use methods which reduce soil erosion, including no-till, limited till and contour plowing; these methods also reduce pesticide run-off. Use of vegetation filter strips along rivers, creeks, streams, wetlands or on the downhill side of fields where run-off could occur will minimize water run-off and is recommended.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

READ ENTIRE LABEL. USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS, AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protections of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, including plants, soil, or water, is:

- Coveralls
- Chemical-resistant gloves made of waterproof material
- Shoes plus socks

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR, Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Keep all unprotected persons out of operating areas, or vicinity where there may be drift.

Do not enter or allow others to enter treated areas until sprays have dried.

TANK MIXES

NOTICE: Tank mixing or use of this product with any other product which is not specifically and expressly authorized by the label shall be the exclusive risk of user, applicator and/or application advisor, to the extent allowed by applicable law.

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

PRODUCT INFORMATION

Alligare Flumi BG is a selective herbicide to maintain bare ground non-crop areas when used in accordance with this label. Alligare Flumi BG is effective as a preemergence and/or postemergence herbicide for control of selected grass and broadleaf weeds.

Alligare Flumi BG controls weeds by inhibiting protoporphyrinogen oxidase, an essential enzyme required by plants for chlorophyll biosynthesis. Seedling weeds are controlled preemergence when exposed to sunlight following contact with the soil applied herbicide.

USE RESTRICTIONS

- Do not apply when weather conditions favor spray drift from treated areas.
- Do not incorporate into soil after application.
- Do not apply this product through any type of irrigation system.
- Do not apply more than 12 oz (0.38 lb ai/A) of Alligare Flumi BG per acre per application.
- Do not apply more than 24 oz (0.76 lb ai/A) of Alligare Flumi BG per acre per year.
- Do not apply more than 2 applications at 12 oz/A (0.38 lb ai/A) or 3 applications at 8 oz/A (0.25 lb ai/A) per year.
- Do not apply to moist or wet desirable plant foliage.
- Do not apply within 300 feet of non-dormant pome or stone fruit crops.

USE PRECAUTIONS

- Treatment of powdery, dry soil or light sandy soil, or light sandy soil when there is little to no likelihood of rainfall soon after may result in off target movement and possible damage to actively growing susceptible crops when soil particles are moved by wind or water. Do not apply when these soil and environmental conditions are present.

RESISTANCE MANAGEMENT

For resistance management, Alligare Flumi BG is a Group 14 herbicide. Any weed population may contain or develop plants naturally resistant to Alligare Flumi BG and other Group 14 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same use site. Appropriate resistance-management strategies should be followed.

To delay herbicide resistance take one or more of the following steps:

- Avoid the consecutive use of Alligare Flumi BG or other target site of action Group 14 herbicides that might have a similar target site of action, on the same weed species.
- Use tank mixtures or premixes with herbicides from different target site of action Groups as long as the involved products are all registered for the same use, have different sites of action and are both effective at the tank mix or prepack rate on the weed(s) of concern.
- Base herbicide use on a comprehensive Integrated Pest Management (IPM) program.
- Scout fields prior to application to identify the weed species present and their growth state to determine if the intended application will be effective.
- Scout fields after application to verify that the treatment was effective and to monitor weed populations for early signs of resistance development.
- Contact your local extension specialist, certified crop advisors and/or manufacturer for herbicide resistance management and/or integrated weed management for specific crops and resistant weed biotypes.

Suspected herbicide-resistant weeds may be identified by these indicators:

- Failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds;
- A spreading patch of non-controlled plants of a particular weed species; and
- Surviving plants mixed with controlled individuals of the same species.

Report any incidence of non-performance of this product against a particular weed species to your Alligare LLC retailer, representative or call 888-252-4427. If resistance is suspected, treat weed escapes with an herbicide having a different mechanism of action and/or use non-chemical means to remove escapes, as practical, with the goal of preventing further seed production.

PREEMERGENCE APPLICATION

Make preemergence application of Alligare Flumi BG prior to weed emergence. Moisture is necessary to activate Alligare Flumi BG for residual weed control. Moisture is needed to move Alligare Flumi BG into the soil for preemergence weed control. Dry weather following application of Alligare Flumi BG may reduce effectiveness.

POSTEMERGENCE APPLICATION

For best results, apply Alligare Flumi BG to actively growing weeds. Applying Alligare Flumi BG under conditions that do not promote active weed growth will reduce herbicide effectiveness. Do not apply Alligare Flumi BG when the weeds are under stress due to drought, excessive water and extremes in temperatures or disease. Alligare Flumi BG is most effective when applied under sunny conditions at temperatures above 65°F.

Alligare Flumi BG is rainfast one hour after application. If rain is expected within one hour of application, efficacy may be reduced. Do not apply under these conditions.

APPLICATION EQUIPMENT

Important: Spray equipment, including all tanks, hoses, booms, screens and nozzles, must be thoroughly cleaned. **Spray equipment used to apply Alligare Flumi BG must not be used to apply other materials to any desirable plant foliage.** Equipment with Alligare Flumi BG residue remaining in the system may result in crop injury to subsequently treated crops.

SPRAYER PREPARATION

Before applying Alligare Flumi BG, start with clean, well maintained application equipment. The spray tank, as well as all hoses and booms must be cleaned to ensure no residue from the previous spraying operation remains in the sprayer. Some pesticides, including but not limited to the sulfonylurea and phenoxy herbicides, are active at very small amounts and can cause crop injury when applied to susceptible crops. The spray equipment must be cleaned according to the manufacturer's directions for the last product used

before the equipment is used to apply Alligare Flumi BG. If two or more products were tank mixed prior to Alligare Flumi BG application, the most restrictive cleanup procedure must be followed.

MIXING INSTRUCTIONS

1. Fill clean spray tank 1/2 to 2/3 of desired level with clean water.
2. To ensure a uniform spray mixture, pre-slurry the required amount of Alligare Flumi BG with water prior to addition to the spray tank. Use a minimum of 1 gal of water per 10 oz of Alligare Flumi BG.
3. While agitating, slowly add the pre-slurried Alligare Flumi BG to the spray tank. Agitation creates a rippling or rolling action of the water surface.
4. If tank mixing Alligare Flumi BG with other labeled herbicides, add water soluble bags first, followed by dry formulations, flowables, emulsifiable concentrates and then solutions. Prepare no more spray mixture than is required for the immediate spray operation.
5. Add any required adjuvants.
6. Fill spray tank to desired level with water. **Continue agitation until spray solution has been applied.**
7. Mix only the amount of spray solution that can be applied the day of mixing. Apply Alligare Flumi BG within 24 hours of mixing.

SPRAYER CLEANUP

Except for dedicated bare ground herbicide application equipment, clean spray equipment each day following Alligare Flumi BG application. The following steps must be used to clean the spray equipment:

1. Completely drain the spray tank, rinse the sprayer thoroughly, including the inside and outside of the tank and all in-line screens.
2. Fill the spray tank with clean water and flush all hoses, booms, screens and nozzles.
3. Top off tank, add suitable commercial spray tank cleaning material, following label directions, or add 1 gal of 3% household ammonia for every 100 gals of water, circulate through sprayer for 5 minutes, and then flush all hoses, booms, screens and nozzles for a minimum of 15 minutes.
4. Drain tank completely.
5. Add enough clean water to the spray tank to allow all hoses, booms, screens and nozzles to be flushed for 2 minutes.
6. Remove all nozzles and screens and rinse them with clean water.

SPRAY DRIFT REDUCTION

Do not apply under circumstances where possible drift to unprotected persons or to food, forage or other plantings that might be damaged or crops thereof rendered unfit for sale, use or consumption can occur.

- Use the largest droplet size consistent with acceptable efficacy. Formation of very small droplets may be minimized by appropriate nozzle selection, by orienting nozzles away from the air stream as much as possible and by avoiding excessive spray boom pressure. For ground boom and aerial applications, use medium or coarser spray nozzles according to ASAE 572 definition for standard nozzles or a volume mean diameter (VMD) of 300 microns or greater for spinning atomizer nozzles.
- Make aerial or ground applications when the wind velocity favors on-target product deposition. Drift potential is lowest between wind speeds of 2-10 mph. For all non-aerial applications, wind speed must be measured adjacent to the application site on the upwind side immediately prior to application.
- Do not make aerial or ground application into areas of temperature inversions. Inversions are characterized by stable air and increasing temperatures with increasing distance above the ground. Mist or fog may indicate the presence of an inversion in humid areas. Where permissible by local regulations, the applicator may detect the presence of an inversion by producing smoke and observing a smoke layer near the ground surface.

- Low humidity and high temperatures increase the evaporation rate of spray droplets and therefore the likelihood of increased spray drift. Avoid spraying during conditions of low humidity and/or high temperatures.
- All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers.
- For ground boom applications, apply nozzle height at the lowest boom height which provides uniform coverage and reduces exposure to evaporation and wind.

WEEDS CONTROLLED

When Alligare Flumi BG is applied preemergence or postemergence at specified rates and weed stages, the following grasses, broadleaf weeds are controlled.

TABLE 1. WEEDS CONTROLLED BY ALLIGARE FLUMI BG

Common Name	Scientific Name
Alyssum, Hoary	<i>Berteroa incana</i>
Amaranth	
Palmer	<i>Amaranthus palmeri</i>
Spiny	<i>Amaranthus spinosus</i>
Barnyardgrass*	<i>Echinochloa crus-galli</i>
Beggarweed, Florida	<i>Desmodium tortuosum</i>
Bittercress, Hairy	<i>Cardamine hirsuta</i>
Bluegrass, Annual*	<i>Poa annua</i>
Burclover, California	<i>Medicago polymorpha</i>
Carpetweed	<i>Mollugo verticillata</i>
Chickweed	
Common	<i>Stellaria media</i>
Mouseear	<i>Cerastium vulgatum</i>
Crabgrass	
Large*	<i>Digitaria sanguinalis</i>
Smooth*	<i>Digitaria ischaemum</i>
Southern*	<i>Digitaria ciliaris</i>
Croton, Tropic	<i>Croton glandulosus var. septentrionalis</i>
Dandelion*	<i>Taraxacum officinale</i>
Dogfennel	<i>Eupatorium capillifolium</i>
Doveweed	<i>Murdannia nudiflora</i>
Eclipta	<i>Eclipta prostrata</i>
Filaree, Redstem*	<i>Erodium cicutarium</i>
Foxtail	
Bristly*	<i>Setaria verticillata</i>
Giant*	<i>Setaria faberi</i>
Green*	<i>Setaria viridis</i>
Yellow*	<i>Setaria glauca</i>
Galinsoga, Hairy	<i>Galinsoga ciliata</i>
Geranium, Carolina	<i>Geranium carolinianum</i>
Goosegrass*	<i>Eleusine indica</i>
Groundsel, Common	<i>Senecio vulgaris</i>
Henbit	<i>Lamium amplexicaule</i>
Horseweed*	<i>Conyza canadensis</i>
Indigo, Hairy	<i>Indigofera hirsuta</i>
Ivy, Ground*	<i>Glechoma hederacea</i>
Jimsonweed	<i>Datura stramonium</i>
Kochia	<i>Kochia scoparia</i>
Kyllinga, Green*	<i>Kyllinga brevifolia</i>

Common Name	Scientific Name
Ladysthumb	<i>Polygonum persicaria</i>
Lambsquarters, Common	<i>Chenopodium album</i>
Liverwort	<i>Marchantia polymorpha</i>
Lovegrass, California*	<i>Eragrostis diffusa</i>
Mallow	
Common	<i>Malva neglecta</i>
Little	<i>Malva parviflora</i>
Venice	<i>Hibiscus trionum</i>
Mayweed*	<i>Anthemis cotula</i>
Morningglory	
Entireleaf	<i>Ipomoea hederacea</i> var. <i>integriuscula</i>
Ivyleaf	<i>Ipomoea hederacea</i>
Red/Scarlet	<i>Ipomoea coccinea</i>
Smallflower	<i>Jacquemontia tamnifolia</i>
Tall	<i>Ipomoea purpurea</i>
Moss	<i>Bryum</i> spp.
Mustard	
Tumble	<i>Sisymbrium altissimum</i>
Wild	<i>Brassica kaber</i>
Nightshade	
Black	<i>Solanum nigrum</i>
Eastern Black	<i>Solanum ptycanthum</i>
Hairy	<i>Solanum sarrachoides</i>
Panicum	
Fall*	<i>Panicum dichotomiflorum</i>
Texas*	<i>Panicum texanum</i>
Parsley-Piert	<i>Alchemilla arvensis</i>
Pearlwort, Birdseye*	<i>Sagina procumbens</i>
Pennycress, Field	<i>Thlaspi arvense</i>
Phyllanthus, Longstalked	<i>Phyllanthus tenellus</i>
Pigweed	
Prostrate	<i>Amaranthus blitoides</i>
Redroot	<i>Amaranthus retroflexus</i>
Smooth	<i>Amaranthus hybridus</i>
Tumble	<i>Amaranthus albus</i>
Pineappleweed*	<i>Matricaria matricarioides</i>
Plantain	
Broadleaf*	<i>Plantago major</i>
Buckhorn*	<i>Plantago lanceolata</i>
Poinsettia, Wild	<i>Euphorbia heterophylla</i>
Puncturevine	<i>Tribulus terrestris</i>
Purslane, Common	<i>Portulaca oleracea</i>
Pusley, Florida	<i>Richardia scabra</i>
Ragweed	
Common	<i>Ambrosia artemisiifolia</i>
Giant	<i>Ambrosia trifida</i>
Redmaids	<i>Calandrinia ciliata</i>
Redweed	<i>Melochia corchorifolia</i>
Rocket, Yellow	<i>Barbarea vulgaris</i>
Senna, Coffee	<i>Cassia occidentalis</i>
Sesbania, Hemp	<i>Sesbania exaltata</i>
Shepherd's-Purse	<i>Capsella bursa-pastoris</i>
Sida, Prickly (Teaweed)	<i>Sida spinosa</i>
Signalgrass*	<i>Brachiaria platyphylla</i>
Smartweed, Pennsylvania	<i>Polygonum pennsylvanicum</i>

Common Name	Scientific Name
Sowthistle, Annual	<i>Sonchus oleraceus</i>
Spurge	
Prostrate	<i>Euphorbia humistrata</i> Engelm
Spotted	<i>Euphorbia maculata</i>
Starbur, Bristly*	<i>Acanthospermum hispidum</i>
Thistle	
Canada*	<i>Cirsium arvense</i>
Russian	<i>Salsola iberica</i>
Velvetleaf	<i>Abutilon theophrasti</i>
Waterhemp	
Common	<i>Amaranthus rudis</i>
Tall	<i>Amaranthus tuberculatus</i>
Woodsorrel, Yellow*	<i>Oxalis stricta</i>

*Preemergence control only.

DIRECTIONS FOR USE TO MAINTAIN BARE GROUND NON-CROP AREAS

Alligare Flumi BG, when used as directed, can be used for non-selective vegetation control to maintain bare ground non-crop areas that must be kept weed-free. Apply Alligare Flumi BG only to:

- Bare ground under guard rails, above-ground pipelines, and railroad beds, railroad yards and surrounding area
- Bare ground in parking and storage areas, plant sites, substations, pumping stations, and tank farms
- Bare ground areas of airports, brick yards, industrial plant sites, lumber yards, military installations, and storage areas
- Bare ground around farm buildings, and along ungrazed fence rows, wind breaks and shelter belts
- Road surfaces, improved roadside areas and gravel shoulders

Follow all applicable directions as outlined above under Product Information. See Table 1 for a list of broadleaf weeds and grasses controlled by Alligare Flumi BG.

Alligare Flumi BG offers residual and postemergence control of susceptible broadleaf and grass weeds as well as additional mode of action to assist in the control of ALS (acetolactate synthase) resistant weeds. The length of residual control is dependent on the rate applied as well as on rainfall and temperature conditions. Length of residual control will decrease as temperature and precipitation increase.

PREEMERGENCE APPLICATION

Apply 8 to 12 oz (0.25 to 0.38 lb ai/A) of Alligare Flumi BG per broadcast acre as a preemergence application. Make preemergence (to weed emergence) applications of Alligare Flumi BG to a weed free soil surface. Preemergence applications of Alligare Flumi BG must be completed prior to weed emergence. Moisture is necessary to activate Alligare Flumi BG on soil for residual weed control. Dry weather following application of Alligare Flumi BG may reduce effectiveness. However, when adequate moisture is received after dry conditions, Alligare Flumi BG will control susceptible germinating weeds.

POSTEMERGENCE APPLICATION

Apply 8 to 12 oz (0.25 to 0.38 lb ai/A) of Alligare Flumi BG per broadcast acre plus an adjuvant (0.25% v/v non-ionic surfactant or 1 qt/A crop oil concentrate). The addition of an adjuvant enhances Alligare Flumi BG activity on emerged weeds. Thorough spray coverage is necessary to maximize the postemergence activity of Alligare Flumi BG. Emerged weeds are controlled postemergence with Alligare Flumi BG, however, translocation of Alligare Flumi BG within a weed is limited, and control is affected by spray

coverage and by the addition of an adjuvant. The most effective postemergence weed control with Alligare Flumi BG occurs when applied in combination with a surfactant to weeds less than 2 inches in height.

SOIL CHARACTERISTICS

Application of Alligare Flumi BG to soils with high organic matter and/or high clay content may require higher dosages than with soils with low organic matter and/or low clay content. Application to cloddy seedbeds can result in reduced weed control.

CARRIER VOLUME AND SPRAY PRESSURE

PREEMERGENCE APPLICATION

To ensure uniform coverage, use at least 10 gals of spray solution per acre. Nozzle selection must meet manufacturer's gallonage and pressure specifications for preemergence herbicide application.

POSTEMERGENCE APPLICATION

To ensure thorough coverage, use at least 15 gals of spray solution per acre. Use at least 20 gals per acre if dense vegetation or heavy residue is present on the soil surface. Nozzle selection must meet manufacturer's gallonage and pressure specifications for postemergence herbicide application.

ADDITIVES

POSTEMERGENCE APPLICATIONS

When applying Alligare Flumi BG after weed emergence, mix with an agronomically approved adjuvant. Use a crop oil concentrate which contains at least 15% emulsifiers and 80% oil or a non-ionic surfactant containing at least 80% active ingredient when applying Alligare Flumi BG as part of a postemergence weed control program. Verify mixing compatibility by a jar test before using.

Buffering Agents and Water Conditioners - A spray grade nitrogen source (either ammonium sulfate at 2.0 to 2.5 lb/A or a 28 to 32% nitrogen solution at 1 to 2 qt/A) may be added to the spray mixture along with a crop oil concentrate or non-ionic surfactant to enhance weed control. The addition of a nitrogen source does not replace the need for crop oil concentrate or non-ionic surfactant.

JAR TEST TO DETERMINE COMPATIBILITY OF ADJUVANTS AND ALLIGARE FLUMI BG

Perform a jar test before mixing commercial quantities of Alligare Flumi BG, when using Alligare Flumi BG for the first time, when using new adjuvants or when a new water source is being used.

1. Add 1 pt of water to a quart jar. Use water from the same source and the same temperature as the water used in the spray tank mixing operation.
2. Add 3 grams (approximately 1 level tsp) of Alligare Flumi BG for the 8 oz/A rate or 4 grams (approximately 1 ½ tsp) for 12 oz/A rate to the jar. Gently mix until product disperses.
3. Add 60 ml (4 Tbsp or 2 fl oz) of additive to the quart jar and gently mix.
4. If nitrogen is being used, add 16 ml (1 Tbsp) of the 28 to 32% nitrogen source to the quart jar. If ammonium sulfate is being used, add 19 grams of AMS to the quart jar in place of the 28 to 32% nitrogen.
5. Place cap on jar, invert 10 times, let stand for 15 minutes, evaluate.
6. An ideal tank mix combination will be uniform and free of suspended particles. If any of the following conditions are observed, question the choice of adjuvants:
 - a) Layer of oil or globules on the solution surface.
 - b) Flocculation: Fine particles in suspension or as a layer on the bottom of the jar.
 - c) Clabbering: Thickening texture (coagulated) like gelatin.

APPLICATION EQUIPMENT

Application equipment must be clean and in good repair. Nozzles must be uniformly spaced on boom and frequently checked for accuracy.

BROADCAST APPLICATION

Apply Alligare Flumi BG and Alligare Flumi BG tank mixes, with ground equipment using standard commercial sprayers equipped with nozzles designed to deliver the desired spray pressure and spray volume.

BAND APPLICATION

When banding, use proportionately less water and Alligare Flumi BG per acre.

HANDGUN APPLICATION

Applications may also be made using a handgun sprayer. Use a spray volume of at least 40 gals per acre to insure uniform coverage.

AERIAL APPLICATION

- **Aerial applications are limited to maintaining weed free railroad beds, railroad yards and surrounding areas and military installations.**

To obtain satisfactory weed control with aerial applications of Alligare Flumi BG, uniform coverage must be obtained. Do not spray when drift is possible or when wind velocity is more than 10 mph. Avoid spraying Alligare Flumi BG within 200 feet of dwellings, adjacent sensitive crops or environmentally sensitive areas. To obtain satisfactory application and drift, the following directions must be observed:

- **Volume Pressure**
Use Alligare Flumi BG in 5 to 10 gals of water per acre with a maximum spray pressure of 40 PSI. Application at less than 5 gals per acre will provide inadequate weed control. Higher gallonage applications provide more consistent weed control.
- **Nozzle and Nozzle Operation**
Use nozzles that produce flat or hollow cone spray patterns. Use non-drip type nozzles, including diaphragm type nozzles to avoid unwanted discharge of spray solution. The nozzle must be directed toward the rear of the aircraft, at an angle between 0 and 15° downward. Do not place nozzles on the outer 25% of the wings or rotors.
- **Adjuvants**
Refer to the additive section or the tank mix partner label for adjuvant directions.

TANK MIX APPLICATION

In addition to weeds controlled by Alligare Flumi BG used alone, tank mixtures with other preemergence and postemergence herbicides registered for use in non-crop areas provide a broader spectrum of weed control. Alligare Flumi BG must be tank mixed with other non-crop herbicides including, but not limited to those products listed below.

TANK MIX COMBINATIONS FOR NON-SELECTIVE VEGETATION CONTROL

2,4-D	hexazinone	picloram
bromacil	imazapic	pramitol
chlorsulfuron	imazapyr	prodiamine
dicamba	metsulfuron methyl	simazine
diuron	norflurazon	sulfometuron methyl
clopyralid	oryzalin	tebuthiuron
glyphosate	pendimethalin	triclopyr

IMPORTANT: Completely read and follow the label of any potential Alligare Flumi BG tank mix partner. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

RESTRICTIONS AND LIMITATIONS

- Do not apply more than 12 oz (0.38 lb ai/A) of Alligare Flumi BG per acre per application.
- Do not apply more than 2 applications at 12 oz/A (0.38 lb ai/A) or 3 applications at 8 oz/A (0.25 lb ai/A) per year.
- Do not re-apply Alligare Flumi BG within 30 days.

DIRECTIONS FOR USE IN CONIFER RE-FORESTATION SITES FOLLOWING TIMBER HARVEST (Not for use in California)

Alligare Flumi BG is a preemergence and postemergence herbicide for control of selected grass and broadleaf weeds in conifer re-forestation sites following timber harvest operations. Alligare Flumi BG may be used as a site preparation treatment prior to transplanting of conifers or as a conifer release treatment after stand establishment.

Apply Alligare Flumi BG in at least 10 gals of water per acre to achieve uniform spray coverage using ground or aerial spray equipment.

Site Preparation – Application Before Transplanting

Apply 8 to 12 oz of Alligare Flumi BG per acre. Transplant operations must take place at least 3 months after application. To obtain optimal weed control, apply Alligare Flumi BG before weed emergence or after a burndown herbicide has controlled existing vegetation. If existing weed canopy is less than 40%, Alligare Flumi BG may be tank mixed with a burndown herbicide to provide preemergence weed control.

Conifer Release Treatments – Applications only within 3 years after transplanting.

Apply 8 to 12 oz of Alligare Flumi BG per acre over the top of trees prior to budbreak in the spring or after dormancy in fall. Do not apply Alligare Flumi BG over the top of trees after budbreak or needle spotting and defoliation may occur. Alligare Flumi BG should not affect new growth of trees. See Table 2 for a list of tolerant conifers for over the top treatments. Do not apply Alligare Flumi BG over the top unless trees are more than two years past seedling, also known as 1+1 stock.

TANK MIXING – Conifer Release Treatments

Certain liquid formulations of other pesticides may increase the postemergence activity of Alligare Flumi BG, but may also increase the potential for injury when applied over the top of various plants. Therefore, tank mixtures of these materials with Alligare Flumi BG may be more injurious than Alligare Flumi BG applied alone and need to be tested to determine if they can be used safely on a widespread basis.

ADJUVANTS – Conifer Release Treatments

When using as a Conifer Release Treatment, do not mix Alligare Flumi BG with any adjuvant or fertilizer.

IMPORTANT: When applied as directed, the conifers listed in Table 2 have shown tolerance to Alligare Flumi BG. However, Alligare Flumi BG is a very active herbicide and the user must exercise responsible judgment and caution until familiarity is gained with this product. If a desired conifer species is not listed in Table 2, evaluate the safety of Alligare Flumi BG on a small number of plants under commercial growing conditions, and monitor plant response for four to six weeks for phytotoxicity. Test Alligare Flumi BG on a small number of plants to determine if Alligare Flumi BG can be used safely on a widespread basis. Do not apply Alligare Flumi BG over the top of conifers until trees have been growing in the treated area for at least

one year. The use of nylon mesh wraps, commonly used to deter animal browsing, may increase plant injury if placed on plants after over the top application of Alligare Flumi BG.

RESTRICTIONS AND LIMITATIONS

- Do not apply more than 12 oz (0.38 lb ai/A) of Alligare Flumi BG per acre per application.
- Do not apply more than 2 applications at 12 oz/A (0.38 lb ai/A) or 3 applications at 8 oz/A (0.25 lb ai/A) per year.
- Do not re-apply Alligare Flumi BG within 30 days.

TABLE 2: TOLERANT CONIFER TREE SPECIES:

Common Name	Scientific Name
Fir	
Concolor	<i>Abies concolor</i>
Cork Bark	<i>Abies lasiocarpa</i>
Douglas	<i>Pseudotsuga menziesii</i>
Fraser	<i>Abies fraseri</i>
Grand	<i>Abies grandis</i>
Noble	<i>Abies procera</i>
Turkish	<i>Abies bommuelleriana</i>
Hemlock	
Eastern	<i>Tsuga canadensis</i>
Western	<i>Tsuga heterophylla</i>
Pine	
Austrian	<i>Pinus nigra</i>
Eastern White	<i>Pinus strobus</i>
Jack	<i>Pinus banksiana</i>
Japanese Black	<i>Pinus thunbergiana</i>
Loblolly	<i>Pinus taeda</i>
Lodgepole	<i>Pinus contorta</i>
Longleaf	<i>Pinus palustris</i>
Mugo	<i>Pinus mugo</i>
Ponderosa	<i>Pinus ponderosa</i>
Sand	<i>Pinus clausa</i>
Scotch	<i>Pinus sylvestris</i>
Shortleaf	<i>Pinus echinata</i>
Slash	<i>Pinus elliotii</i>
Virginia	<i>Pinus virginiana</i>
Spruce	
Blue	<i>Picea pungens</i>
Dwarf Alberta	<i>Picea glauca conica</i>
Norway	<i>Picea abies</i>
Sitka	<i>Picea sitchensis</i>

**DIRECTIONS FOR USE IN POPLAR PLANTATIONS AND
TIMBER RE-FORESTATION SITES
(Not for use in California)**

Alligare Flumi BG is a preemergence and postemergence herbicide for control of selected grass and broadleaf weeds in poplar plantations and timber re-forestation sites following timber harvest operations. Alligare Flumi BG may be used as a site preparation treatment prior to transplanting of trees or as a release treatment after stand establishment.

Apply Alligare Flumi BG in at least 10 gals of water per acre to achieve uniform spray coverage using ground or aerial spray equipment.

Site Preparation-Application Before Transplanting

Apply 8 to 12 oz of Alligare Flumi BG per acre. Transplant operations must take place at least 3 months after application. To obtain optimal weed control, apply Alligare Flumi BG before weed emergence or after a burndown herbicide has controlled existing vegetation. If existing weed canopy is less than 40%, Alligare Flumi BG may be tank mixed with a burndown herbicide to provide preemergence weed control.

Release Treatments – Applications Within 3 Years After Transplanting

Apply 8 to 12 oz of Alligare Flumi BG per acre over the top of trees prior to budbreak in the spring or after dormancy in fall. Do not apply Alligare Flumi BG over the top of trees after budbreak or leaf spotting and defoliation may occur. Alligare Flumi BG will not affect new growth of trees of tolerant poplars for over the top treatments. Do not apply Alligare Flumi BG over the top unless trees are more than one year old.

TANK MIXING – Poplar Release Treatments

Certain liquid formulations of other pesticides may increase the postemergence activity of Alligare Flumi BG, but may also increase the potential for injury when applied over the top of various plants. Therefore, tank mixtures of these materials with Alligare Flumi BG may be more injurious than Alligare Flumi BG applied alone and need to be tested to determine if they can be used safely on a widespread basis.

ADJUVANTS – Poplar Release Treatments

When applying Release Treatments, do not mix Alligare Flumi BG with any adjuvant or fertilizer.

IMPORTANT: When applied as directed, poplars (*Populus balsamifera*, *P. grandidentata*, *P. niger* and *P. tremuloides*), hybrid poplars (*P. sp. x sp.*), and cottonwoods (*P. deltoides* and *P. trichocarpa*) have shown tolerance to Alligare Flumi BG. However, Alligare Flumi BG is a very active herbicide and the user must exercise responsible judgment and caution until familiarity is gained with this product. Test Alligare Flumi BG on a small number of plants to determine if Alligare Flumi BG can be used safely on a widespread basis.

RESTRICTIONS AND LIMITATIONS

- Do not apply more than 12 oz (0.38 lb ai/A) of Alligare Flumi BG per acre per application.
- Do not apply more than 2 applications at 12 oz/A (0.38 lb ai/A) or 3 applications at 8 oz/A (0.25 lb ai/A) per year.
- Do not re-apply Alligare Flumi BG within 30 days.

STORAGE AND DISPOSAL

STORAGE: Keep pesticide in original container. Store in a cool, dry, secure place. Do not put formulation or dilute spray solution into food or drink containers. Do not store or transport near feed or food. Not for use or storage in or around the home. Do not contaminate water, food or feed by storage, disposal or cleaning equipment.

PESTICIDE DISPOSAL: Waste resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER HANDLING:

[Container statement for Nonrefillable plastic container small enough to shake]

[Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling, if available or puncture and dispose of in a sanitary landfill.]

[-or-]

[Container statement for Nonrefillable plastic bag.]

[Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment, then offer for recycling if available or dispose of empty bag in a sanitary landfill or by incineration.]

[-or-]

[Container statement for Nonrefillable fiber drum with liner]

[Nonrefillable container. Do not reuse or refill this container. Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment. Then offer for recycling if available or dispose of in a sanitary landfill or by incineration. If drum is contaminated and cannot be reused, dispose of it in the manner required for its liner.]

CONDITION OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

To the extent consistent with applicable law, upon purchase or use of this product, purchaser and user agree to the following terms:

Warranty: Alligare, LLC (the Company) warrants that this product conforms to the chemical description on the label in all material respects and is reasonably fit for the purpose referred to in the directions for use, subject to the exceptions noted below, which are beyond the Company's control. To the extent consistent with applicable law, the Company makes no other representation or warranty, express or implied, concerning the product, including no implied warranty of merchantability or fitness for a particular purpose. To the extent consistent with applicable law, no such warranty shall be implied by law, and no agent or representative is authorized to make any such warranty on the Company's behalf.

Terms of Sale: The Company's directions for use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, and the manner of use or application (including failure to adhere to label directions), all of which are beyond the Company's control. To the extent consistent with applicable law, all such risks are assumed by the user.

Limitation of Liability: To the extent consistent with applicable law, the exclusive remedy against the Company for any cause of action relating to the handling or use of this product is a claim for damages, and in no event shall damages or any other recovery of any kind exceed the price of the product which caused the alleged loss, damage, injury or other claim. To the extent consistent with applicable law, under no circumstances shall the Company be liable for any special, indirect, incidental or consequential damages of any kind, including loss of profits or income. Some states do not allow the exclusion or limitation of incidental or consequential damages.

The Company and the seller offer this product, and the purchaser and user accept this product, subject to the foregoing warranty, terms of sale and limitation of liability, which may be varied or modified only by an agreement in writing signed on behalf of the Company by an authorized representative.

[PROMENADE™ is a trademark of ADAMA group company.](#)

EPA [2018071220180731](#)